Wales, Cardiff - data from these case notes and post-operative imaging regarding tumour resection was documented and analysed.
Results: 44 patients were identified. 19 children had pilocytic astrocytomas, 17 medulloblastomas and 8 had ependymomas. The mean age at operation was 7 years 2 months. Complete resections were achieved in 13 out of 19 (68.4%) pilocytic astrocytomas, 13 of 17 medulloblastomas (76.5%) and 5 of 8 ependymoma cases (62.5%). However, the complete resection rate for the last 21 cases has been 90.5% overall.
Conclusions: Over the last decade complete resection rates, in Cardiff, for pilocytic astrocytomas in children has been less than ideal, however, paradoxically the resection rates for the perceived more difficult tumours has been very good, especially medulloblastomas. Encouragingly complete resection rates are improving and the reasons for this are likely to be multi-factorial.

0219: A SINGLE CENTRE AUDIT INTO THE OUTCOME OF TRANSSPHENOIDAL SURGERY IN THE TREATMENT OF ACROMEGALY

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Aim: The mainstay of treatment for growth hormone (GH) producing pituitary tumours is surgical resection using a transsphenoidal approach.
Method: This audit retrospectively examined the remission rate of acromegaly following primary transsphenoidal surgery at a single centre from 2004 to 2011. The same data from 1996-2003 are also presented for comparison. Remission was defined biochemically as a GH level of less than 5 mU/L in the period 6 weeks to 6 months following surgery.
Results: The overall cure rate for all patients in the series (n=41) was 63.4%. This is a considerable improvement when compared to the 1996-2003 figure of 29.4% (n=17). When looking at the cure rates in relation to tumour size, the overall cure rate for macroadenomata was 61.9% (n=21) and for microadenomata it was 69.2% (n=13). The cure rate for macroadenomata compares particularly favourably with the recent literature, with cure rates of 50% being reported in specialist centres.
Conclusion: As a result of increased individual experience, the cure rate of surgical resection in acromegalic patients has improved rapidly since the adoption of a dedicated pituitary surgeon. A particular improvement in remission rate has been seen in the macroadenoma group. This practice is becoming commonplace and ought to be emulated nationwide.

0321: PREVENTING SURGICAL SITE INFECTION IN NEUROSURGERY: A 4 YEAR AUDIT

Patrick J. Grover, Jonathan Lamb, Matthew J. Pywell, Lewis Thorne. *Royal Free Hospital, London, UK*

Introduction: An estimated 14% of hospital infections are surgical site infections. They are associated with a greater than twofold increase in hospital stay and mortality. A NICE approved audit tool is available to improve standards in preventing infections.
Methods: An audit using the Department of Health Saving Lives High Impact Tool (2007) was carried out in 2008, 2010 and 2011. All neurosurgical inpatients on the day of audit were reviewed for peri-operative compliance with standards for hair removal, temperature control, glucose control and antibiotic prophylaxis.
Results: 18-20 patients per year met the inclusion criteria. Hair removal compliance was 100% in 2010 and 2011, improved from 50% in 2008. Antibiotic compliance was 72% in 2011, 70% in 2010 and 60% in 2008. Glucose control was maintained in 94% of cases in 2011 compared with 85% in 2010 and 100% in 2008. Temperature was maintained above 37C in 39% of cases in 2011, 85% in 2010 and 10% in 2008. All results were presented locally following each audit cycle.
Conclusion: Compliance has improved since the introduction of the audit cycle. However, in some instances, for example temperature control, it has fallen. Regular audit and local teaching are required to maintain standards.

0546: DRIVING ADVICE FOLLOWING NEUROSURGERY: AN AUDIT TO SEE WHETHER PATIENTS ARE GIVEN APPROPRIATE DRIVING INFORMATION

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The DVLA has national guidelines regarding the fitness to drive following surgery. We surveyed patients discharged from our unit following neurosurgical intervention to see whether they were provided with driving advice according to the DVLA guidelines. Over a 3 week period, 52 patients were discharged from our unit. Of these, 38 patients (73%) were current motor vehicle drivers (all of group 1 vehicles: motorcycles, cars). 8 patients (21%) were advised to inform the DVLA regarding their recent surgery and only 2 of these (5%) given specific driving advice regarding the driving restrictions that applied following their surgery.
Driving advice is not given to the majority patients following neurosurgical intervention and we believe this is mirrored across all surgical specialities. It is our obligation to ensure that all patients are advised to inform the DVLA of their recent surgery, and at a minimum, all patients should be told to refer to the DVLA website to look at their driving restrictions.

0727: INFLUENCE OF CLINICIAN GRADE ON NEUROSURGICAL REFERRAL OUTCOME

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Aim: Our neurosurgical unit receives approximately 300 referrals per month. We aim to assess if the grade of the referring clinician affects the referral outcome.
Methods: A retrospective analysis of all (890) emergency neurosurgical referrals made in a three month period (June – August 2011). Parameters assessed were grade of referring clinician versus referral outcome. Referrers included nursing staff, house officers, SHOs, registrars, GPs and Consultants.
Results: Of 890 referrals, 30% were from house officers (FY1) - (13% were accepted and 60% were rejected).
33% of the referrals were made by SHO grade doctors (12% accepted, 65% rejected, 4% discussed at MDT and 3% followed up in clinic). Registrar level clinicians referred 39% of the cases (22% accepted, 61% rejected, 3% discussed at MDT and 1% followed up in clinic). 6% of referrals were from consultants (30% accepted, 47% rejected, 8% discussed at MDT and 3% followed up in clinic) One of these referrals was made by a nurse and this was rejected.
Conclusion: Our results show that a neurosurgical referral would likely get accepted if done by a senior grade clinician. This is probably due to several factors e.g. referring more urgent cases or because of more clinical experience.

0771: MANAGEMENT OF CEREBRAL ARTERIOVENOUS MALFORMATION (AVM): A QUALITY-BASED HOLISTIC APPROACH

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Aim: Unruptured AVMs have huge ability for acute insult to cerebral circulation. The decision for invasive treatment is based on the potential to successfully reduce the risk. This study examines subjective quality of life and patient perspectives throughout management with an aim to improve the model for health-care delivery.
Method: A cohort of recently-diagnosed patients with unruptured AVMs (n=33) were identified and consented for interview.
A structured questionnaire was engineered to assess raw, subjective psychology. Patients were evaluated three times throughout management across all treatment modalities (conservative, endovascular, removal).
Results: Analysis exhibited qualitative data describing patient experiences. Diagnosis produced negative impact in 100%. A spectrum of severity was experienced. The best response being “I want to get rid of this” and the worst; “I feel like life is over”.
Patients described wide-ranging emotions, but common significant themes were; fear of spontaneous death (84%), anxiety of operation (60%), long-term disability (42%) and the risk of re-bleed (30%).
Conclusions: Surgical management of AVMs is rightly based on angiomorphology and potential for cure. The study demonstrates that addition of education and psychological support provides an added opportunity to greatly improve patient experience and the quality of healthcare.

0773: DO OPERATIVE NOTES FROM THE NATIONAL HOSPITAL FOR NEUROLOGY AND NEUROSURGERY, QUEEN SQUARE, FOLLOW GOOD SURGICAL PRACTICE GUIDELINES?

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